

**REMARKS/ARGUMENTS**

Claims 1-6 and 11-12 are currently pending. By this Response, claims 1 and 6 are amended and new claims 11-12 are added. No new matter is presented, and this amendment is fully supported by the specification. It is respectfully submitted that claims 1-6 and 11-13 are in condition for allowance in view of the amendments and remarks presented herein.

In the present Office Action, dated February 20, 2007 (the "Office Action"), all claims were rejected as anticipated by, or in the alternative obvious over, Hubbell, et al. (WO 93/17669), Kim, et al., or Loomis (U.S. Patent Number 5,854,382) (it is noted that the obvious rejections are not based upon any combination of these references). Additionally, claims 1-3 and 5-6 were rejected as anticipated by, or in the alternative obvious over, Sawhney. Reconsideration of the rejections in the Office Action in view of the following remarks is respectfully requested.

**I. Hubbell Neither Anticipates nor Renders Obvious the Pending Claims**

The Office Action rejects claims 1-6 as anticipated, or rendered obvious, by Hubbell. These rejections are respectfully traversed.

As an initial matter, neither the present Office Action nor the previous action provides any specific explanation as to why Hubbell allegedly anticipates or renders obvious the claimed subject matter.

Hubbell describes hydrogels of polymerized and crosslinked macromers containing hydrophilic oligomers having biodegradable monomeric or oligomeric extensions, wherein the biodegradable extensions are terminated on free ends with end cap monomers or oligomers capable of polymerization and crosslinking. Hubbell does not disclose amorphous shape memory polymeric networks, wherein A blocks of the ABA triblock have a molecular weight of 1500 g/mol to 3200 g/mol as claimed in claim 1-6.

To establish a *prima facie* case of anticipation under 35 U.S.C. § 102(b), the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. MPEP 2131. Applicants respectfully submit that this criterion has not been met for Claims 1-6.

The Applicant asserts that hydrogels of Hubbell are not materials showing a shape memory effect. Furthermore, the Office Action incorrectly assumes that—prior to hydration—the networks recited in Hubbell somehow inherently possess the shape memory characteristics of

the claimed networks. In this regard, it is noted that the crosslinking reaction leading to the hydrogels in Hubbell occurs in the aqueous phase (not prior to hydration as presumed in the Office Action), so that hydrogels are formed directly (see Hubbell page 25, last paragraph).

To establish a *prima facie* case of obviousness, *inter alia*, the prior art reference must disclose or suggest all of the claimed features. MPEP 2143. Applicants respectfully submit that this criterion has not been met for Claims 1-6.

For at least these reasons, Applicant respectfully submits that Hubbell neither anticipates nor renders obvious claims 1-6.

### **II. Kim Neither Anticipates nor Renders Obvious the Pending Claims**

The Office Action rejects claims 1-6 as anticipated, or rendered obvious, by Kim. These rejections are respectfully traversed.

Kim describes biodegradable hydrogels from poly(ether-ester) networks prepared by UV photopolymerization. The polymers in Kim are restricted to those having very short ester blocks. This leads, as mentioned by the Examiner, to no separate glass transition points and, accordingly, to a lack of shape memory effect. Kim does not disclose amorphous shape memory polymeric networks, wherein A blocks of the ABA triblock have a molecular weight of 1500 g/mol to 3200 g/mol as recited in claims 1-6.

For at least these reasons, Applicant respectfully submits that Kim neither anticipates nor renders obvious claims 1-6.

### **III. Loomis Neither Anticipates nor Renders Obvious the Pending Claims**

The Office Action rejects claims 1-6 as anticipated, or rendered obvious, by Loomis. These rejections are respectfully traversed.

Loomis describes crosslinked hydrogels formed from water-insoluble copolymers. The copolymers contain a bioresorbable region, a hydrophilic region, and at least two crosslinkable functional groups per polymer chain. Loomis, therefore, does not disclose amorphous shape memory polymeric networks, wherein A blocks of the ABA triblock have a molecular weight of 1500 g/mol to 3200 g/mol as recited in claims 1-6.

The Applicant asserts that hydrogels of Loomis are not materials showing a shape memory effect. Furthermore, the Office Action incorrectly assumes that—prior to hydration—the networks recited in Loomis somehow inherently possess the shape memory characteristics of

the claimed networks. In this regard, it is noted that the crosslinking reaction leading to the hydrogels in Loomis occurs in the aqueous phase (not prior to hydration as presumed in the Office Action), so that hydrogels are formed directly (see Loomis, column 6, lines 25-32).

For at least these reasons, Applicant respectfully submits that Loomis neither anticipates nor renders obvious claims 1-6.

**IV. Swahney Neither Anticipates nor Renders Obvious the Pending Claims**

The Office Action rejects claims 1-3 and 5-6 as anticipated, or rendered obvious, by Sawhney. These rejections are respectfully traversed.

Sawhney described bioerodible hydrogels having a poly(ethylene glycol) central block with oligomers of  $\alpha$ -hydroxy acids, such as oligo(*dl*-lactic acid) or oligo(glycolic acid) and terminated with acrylate groups. Sawhney does not disclose amorphous shape memory polymeric networks, wherein A blocks of the ABA triblock have a molecular weight of 1500 g/mol to 3200 g/mol as recited in claims 1-3 and 5-6.

The Applicant asserts that hydrogels of Sawhney are not materials showing a shape memory effect. Furthermore, the Office Action incorrectly assumes that—prior to hydration—the networks recited in Sawhney somehow inherently possess the shape memory characteristics of the claimed networks. In this regard, it is noted that the crosslinking reaction leading to the hydrogels in Sawhney occurs in the aqueous phase (not prior to hydration as presumed in the Office Action), so that hydrogels are formed directly (see Sawhney, page 583, column 1, UV Polymerization).

For at least these reasons, Applicant respectfully submits that Sawhney neither anticipates nor renders obvious claims 1-3 or 5-6.

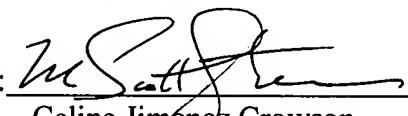
**CONCLUSION**

In view of the foregoing, the Applicants respectfully request that the Examiner enter the above-noted amendments, and that the above remarks be fully considered in conjunction therewith. Timely allowance of all currently pending claims and the issuance of a Notice of Allowance are requested.

In the event that the Examiner considers certain currently rejected claims to be allowable over the prior art and feels that informal discussion would be helpful in progressing the current application toward allowance, the Examiner is invited to contact the undersigned by telephone.

In the event that appropriate fee amount is not enclosed by check for any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1349. Specifically, EXCEPT for fees payable under 37 CFR §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application, including fees due under 37 CFR §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit, any overpayment to deposit account No. 50-1349. This paragraph is intended to be a constructive petition for extension of time in accordance with 37 CFR §1.136(a)(3).

Respectfully submitted,

By:   
Celine Jimenez Crowson  
Registration No. 40,357

Dated: May 21, 2007  
**HOGAN & HARTSON LLP**  
555 13<sup>th</sup> Street, N.W.  
Washington, D.C. 20004  
Telephone: 202-637-3649  
Facsimile: 202-637-5910  
**Customer No. 24633**

M. Scott Stevens  
Registration No. 54,762